

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections contained in the Office Action of August 8, 2008 is respectfully requested.

In order to make necessary editorial corrections, the entire specification and abstract have been reviewed and revised. As the revisions are quite extensive, the amendments to the specification and abstract have been incorporated into the attached substitute specification and abstract. For the Examiner's benefit, a marked-up copy of the specification indicating the changes made thereto is also enclosed. No new matter has been added by the revisions. Entry of the substitute specification is thus respectfully requested.

The Examiner rejected claim 7 under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner asserted that there is insufficient antecedent basis for the limitation recited in independent claim 7. In view of this rejection, independent claim 7 and base dependent claim 3 have been amended so as to provide antecedent basis for the subject matter in claim 7. Consequently, it is submitted that claim 7 now fully complies with all of the requirements of 35 U.S.C. §112, and so the Examiner's former rejection has been overcome. In addition, the remaining claims have also been amended so as to be placed in a preferred form according to U.S. practice.

The Examiner rejected original independent claim 1 and elected dependent claims 2-5, 7, and 9 as being unpatentable over the Dodd reference (U.S. Publication 2006/0153410) in view of the Zirlis reference (U.S.P. 3,780,867). In addition, the Examiner rejected elected dependent claim 6 as being unpatentable over the Dodd reference and the Zirlis reference and further in view of the Loop reference (U.S.P. 6,716,276); and rejected elected dependent claim 8 as being unpatentable over the Dodd reference in view of the Zirlis reference, and further in view of the Maekawa reference (U.S.P. 6,632,771). However, the Examiner's prior art rejections of elected claims 1-9 are respectfully traversed. Furthermore, new dependent claim 20 has now been added, and new claim 20 also reads on the elected invention and species 1A. For the reasons discussed below, it is respectfully submitted that elected claims 1-9 and 20 are clearly patentable over the prior art of record.

As explained in paragraph [0004] on page 2 of the specification, an adsorbent material is provided in the interior of a cabinet for a speaker device in order to physically adsorb gas affected by pressure changes due to vibrations of the speaker unit. As a result, the pressure change within the cabinet is suppressed with the result that the cabinet acts acoustically larger than the actual size of the cabinet. Consequently, the speaker device can provide improved bass reproduction equivalent to a speaker device having a very large cabinet even though the overall size of the speaker device may be relatively small.

Unfortunately, as also explained in paragraph [0007] spanning pages 3 and 4 of the original specification, the adsorbent material which adsorbs the gases so as to suppress the pressure change within the cabinet as explained above will deteriorate over time. As a result, the sound generating performance, and in particular the bass reproduction, of the speaker device will decrease overtime. The present invention has been developed in order to address this problem.

The speaker device of independent claim 1 includes a container *removably attached to an opening in the cabinet*, and the adsorbent material is in the interior of the container. Consequently, as explained in paragraph [0028] spanning pages 8 and 9 of the original specification, the adsorbent material in the interior of the container can be easily removed without disassembling the entire speaker device so as to thereby replace the adsorbent material or reactivate the adsorbent material, as necessary.

The Dodd reference is directed to an apparatus and method for controlling moisture within an enclosure such as a loudspeaker. In particular, the Dodd reference includes a heater 18A located within the cabinet of a load speaker 10, and an additional heater 18B located on tubing 12 leading from the cabinet. In paragraph [0033] of the Dodd reference, it is explained that a tube 22 filled with absorbent material 20 can also be located within the cabinet, as shown in Figure 1 of the Dodd reference. The Dodd reference, however, does not teach that the absorbent material is located in a container that is removably attached to an opening of the cabinet.

Nonetheless, the Examiner applied the Zirlis reference as teaching that it is well known to removably attach a container filled with adsorbent material to another container. Thus, it is

apparently the Examiner's position that the Zirlis reference would provide the necessary teaching for one of ordinary skill in the art to modify the Dodd reference so as to obtain the invention with the container removably attached to an opening of the cabinet, as recited in amended independent claim 1. However, the Applicants respectfully disagree with the Examiner's reasoning.

Firstly, it is noted that paragraph [0033] of the Dodd reference further explains that the tube 22 filled with absorbent material 20 of the Dodd reference is suspended from an arm 24 within the interior of the cabinet. There is not even a suggestion that the tube 22 (i.e., container) is removably attached to an opening in the cabinet.

At the bottom of page 3 of the Office Action, the Examiner notes that it is well known that adsorbent materials require recharging and/or replacement, as exemplified by the Zirlis reference. However, it does not naturally follow from this teaching, and therefore is not obvious, that one of ordinary skill in the art would therefore provide a container for a speaker device removably attached to an opening in a cabinet, as recited in amended independent claim 1. Although there may be many ways to address the problem of deteriorating adsorbent material, this fact alone simply does not provide any reason to modify the cabinet of a speaker device, such as that in the Dodd reference. In fact, the Dodd reference uses an alternate means to address the problem of deteriorating adsorbent material. As explained in, for example, paragraph [0056] of the present application, adsorbent material can be recharged by being *heated* so as to remove the substance adsorbed into the adsorbent material by evaporation. As noted above, the Dodd reference teaches that a heater 18A is located *within* the cabinet of the loudspeaker 10 (see paragraph [0032] of the Dodd reference), which is fully capable of heating and recharging the absorbent material 20 within the tube 22 of the Dodd reference without having to remove or replace the tube 22. In other words, in view of the heater 18A of the Dodd reference, it is completely unnecessary to modify the Dodd reference so as to provide an opening in the cabinet and to allow a container containing adsorbent material to be removably attached to the opening as recited in amended independent claim 1. In fact, such an additional opening could adversely affect the performance of the loudspeaker and, therefore, clearly would not be added unless absolutely necessary.

Finally, although the Zirlis reference teaches a cartridge within a water purification apparatus, and teaches that the cartridge can be removed and replaced if necessary, the Zirlis reference does not teach or even suggest providing an opening in a cabinet of a speaker device, and then providing a container containing adsorbent material removably attached to the opening of the cabinet. Furthermore, the Loop reference and the Maekawa reference also do not teach or even suggest a container and a cabinet arranged as recited in amended independent claim 1. Accordingly, it is respectfully submitted that amended independent claim 1 and the claims that depend therefrom are clearly patentable over the prior art of record.

The Examiner's attention is also directed to new dependent claim 20, which recites additional features further clarifying the distinctions between the present invention and the prior art.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. However, if the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact the Applicant's undersigned representative.

Respectfully submitted,

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